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| 10/814,412 | 03/31/2004 | Goichi Katayama | FS.20133US0A | 5695 |
| 20995 | 7590 | 10/25/2006 | EXAMINER | |
| KNOBBE MARTENS OLSON & BEAR LLP | | | MCMAHON, MARGUERITE J | |
| 2040 MAIN STREET | | | ART UNIT | |
| FOURTEENTH FLOOR | | | PAPER NUMBER | |
| IRVINE, CA 92614 | | | 3747 | |

DATE MAILED: 10/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

NT

Office Action Summary

Application No.

10/814,412

Applicant(s)

KATAYAMA, GOICHI

Examiner

Marguerite J. McMahon

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 and 23-31 is/are rejected.
- 7) ☒ Claim(s) 21 and 22 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 4-15, 19-20, 23, 24, and 27-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al (5,349,928) in view of Uchida (5,630,386). Note an engine comprising an engine body including a plurality of combustion chambers and an air induction system for supplying air to the combustion chamber, the air induction system comprising a support member (or with respect to claims 16, 19, and 30, an induction air support member) attached to the crankcase and defining at least one flow passage, and supported by the support member and communicating with the flow passage so as to regulate an amount of air flow through the flow passage, and at least two runners (or with respect to claims 16, 19, and 30, induction air passages) 58A, 58B, the runners positioned on opposite sides of and attached to the engine body from each other and being in fluid communication with at least one corresponding combustion chamber and with the flow passage of the support member, one end of each runner being supported by the support member and the other end of each runner being supported by the engine body, the flow passage being positioned to deliver air flow from the flow control device to the ends of the runners supported by the support

member, plenum chamber housing 68A comprising a plenum chamber which also acts as a silencer and includes an air intake port 70.

Takahashi et al ('928) shows everything except a flow control device positioned upstream of the flow passage, the air silencer being located at least in part above the crankcase member, and plural plenum chambers.

Uchida teaches that it is old in the art to provide a flow control device in throttle body 128 located upstream of the plenum 124 (see Figure 3). It would have been obvious to one having ordinary skill in the art to modify Takahashi by providing a flow control device upstream of the plenum chamber, in order to control air flow into the plenum chamber, and thus, allowing the flow control device to be positioned upstream of the flow passage.

In addition, it would have been obvious to one having ordinary skill in the art to locate the silencer at least in part above the crankcase member, in an application in which the engine is moved to an orientation, which would locate at least part of the silencer above the crankcase, such as a horizontal crankshaft orientation, which is conventional.

Furthermore, it would have been an obvious matter of design choice to separate the plenum chamber into two plenum chambers, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

Claims 3, 16-18, 25, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al (5,349,928) in view of Takahashi et al (5,829,402),

and Uchida (5,630,386). Takahashi et al ('928) shows everything except the runners being connected to the cylinder head in a manner placing the runner in fluid communication with the intake passage located in the cylinder head and a flow control control device in a throttle body located upstream of the plenum.

Takahashi et al ('402) teaches that it is old in the art to configure the intake system such that the runners are connected to intake passages located in the cylinder head. It would have been obvious to one having ordinary skill in the art to modify Takahashi et al ('928) by employing an intake system configured such that the runners are connected to intake passages located in the cylinder head in lieu of intake passages located in the cylinder, since the two are art recognized alternatives, known for the same purpose.

Uchida teaches that it is old in the art to provide a flow control device in throttle body 128 located upstream of the plenum 124 (see Figure 3). It would have been obvious to one having ordinary skill in the art to modify Takahashi by providing a flow control device upstream of the plenum chamber, in order to control air flow into the plenum chamber.

Allowable Subject Matter

Claims 21 and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments with respect to claims 1-31 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Note the throttle valves upstream of the plenums of the newly cited references.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marguerite J. McMahon whose telephone number is

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571-272-4848. The examiner can normally be reached on Monday-Wednesday and Friday, 10am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Cronin can be reached on 571-272-4536. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



MARGUERITE MCMAHON
PRIMARY EXAMINER